

## 1.5 TESTING ORGANIZATIONS AND ITS COMMITTEE

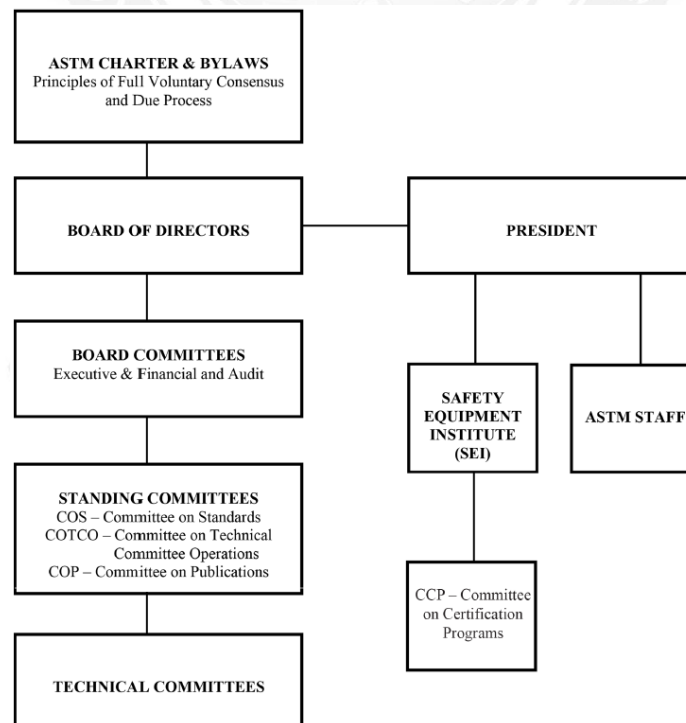
### (a) INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

The International Organization for Standardization (ISO) international standard-setting body composed of representatives the various national standards organizations. ISO is a voluntary organization whose members are recognized authors on standards, each one representing one country. Members meet annually at a General Assembly to discuss the strategic objectives of ISO. The organization is coordinated by a central secretariat based in Geneva.

### (b) ASTM INTERNATIONAL

\* ASTM International, formerly known as American Society for Testing Materials, is an international standards organization that develops publishes voluntary consensus technical standards for a wide range materials, products, systems, and services.

\* Organization Chart



**(c) BUREAU OF INDIAN STANDARDS (BIS)**

- \* BIS is the National Standard Body of India established under the BIS Act 2016 for the harmonious development of the activities of standardization marking and quality certification of goods and for matters connect herewith or incidental thereto.
- \* BIS has been providing traceability and tangibility benefits to the nation economy in a number of ways
  - Providing safe reliable quality goods
  - Minimizing health hazards to consumers
  - Promoting exports and imports substitute
  - Control over proliferation of varieties etc. Through standardization certification and testing

**Organization of BIS**

→The organization of BIS consists of following members,

- ◆ Governing Council Member
- ◆ Executive Committee
- ◆ Administrative Structure

**Other Testing Organizations in India**

- ◆ The National Metrological Institutes (NMIs) namely National Laboratory (NPL) and Bhabha Atomic Research Centre(BARC)
- ◆ The Standards Bodies namely Bureau of Indian Standards (BIS) and Standardization, Testing and Quality Certification(STQC)
- ◆ Council for Industrial and Scientific Research (CSIR), the other Boards Quality Council of India(QCI), the other organizations under nodal department of QCI i.e. Department for Promotion of Industry and Internal Trade, the other Departments / organizations under nodal Ministry i.e. Ministry of Industry and Commerce are the bodies related to NABL

### Some International Standards Organizations:

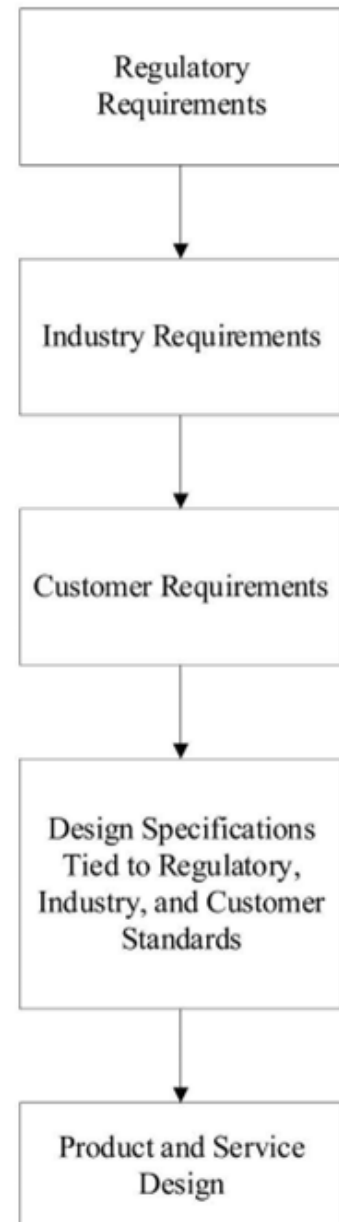
- International Organization for Standardization (ISO)
- American Society of Testing and Materials (ASTM)
- International World Wide Web Consortium (W3C)
- Institute for Reference Materials and Measurements (European Union)
- **Many others .....**

### Some United States Standards Organizations

- American National Standards Institute (ANSI)
- National Institute of Standards and Technology (NIST)
- Society of Automotive Engineers
- American Society of Testing and Materials (ASTM)
- **Many others...**

### A Partial Listing of Standards Organizations by Country

- Australia: Standards of Australia (SA)
- Canada: Standards Council of Canada (SCC)
- China: Standards Administration of China (SAC)
- India: Bureau of Indian Standards (BIS)
- Israel: The Standards Institution of Israel (SII)
- Japan: Japan Industrial Standards Committee (JISC)
- Republic of Korea: Korean Agency for Technology and Standards (KATS)
- Singapore: Standards, Productivity, and Innovation Board (SPRING SG)
- Taiwan (Republic of China): The Bureau of Standards, Metrology, and Inspection (BSMI)
- United Kingdom: British Standards Institution (BSI)
- **Many others by their country ...**



### Codes for TEST procedure - Some of the testing standards codes followed in India

1. Rockwell hardness test (IS: 1586-2000)
2. Brinell and Vickers hardness tests (IS:2281-2005RA-2011)

3. Impact tests (Charpy V-Notch and Izod tests)(18:1757-1928 and 159%-1977RA-2009).
4. Tensile Test(IS:1608-2005RA-2011)
5. Compression Test (IS: 1608-2005/150 4506-1979)
6. Bend test for metal products (IS: 1599-1985RA-2011)
7. Shear Test (IS: 5242-1979RA-2006)
8. Beam or flexural bending test (IS: 16-1959)
9. Torsion test and Fatigue test (15:5074-1969RA-2001 and IS: 50751985RA-2001)
10. Indian Standard Mechanical Testing of Metals Tensile Testing (IS: 1608-1995)
11. Metallic materials-Bend test (IS1599-2012)

For all the tests described in this section, the method as specified in relevant ISO standard may also be followed as an alternate method. The final value, observed or calculated, expressing the result of a test or analysis, is rounded off in accordance with IS: 2-1960. The number of significant places retained in the rounded off that of the specified value in the code.

